STATEMENT OF BASIS

Wabash Alloys, LLC
Steele, AL
St. Clair County
410-0003

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above name applicant has requested authorization to perform the work or operate the facility shown on the application and drawing, plans, and other documents attached herto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Wabash Alloys, LLC, (Wabash) located in Steele, Alabama is a secondary aluminum production facility that produces aluminum ingots from scrap aluminum. Aluminum scrap is fed to a shredder where the scrap is cut into chips. The chips are transported to the two furnaces via a front end loader and melted. After aluminum is melted, it is either cast into ingots or prepared to be shipped to a foundry. The aluminum is shipped to foundries in pot preheaters.

The following are significant sources of air pollution for this facility:

- Two Reverberatory Furnaces with Two Baghouses
- Aluminum Scrap Shredder with Cyclone and Baghouse
- Three (3) Melting/Preheat Pots

Two Reverberatory Furnace (8.75 TPH each) with Two Baghouses

Process Description:

Aluminum scrap is loaded into the furnace charge well via a front end loader. After loading, the material is melted. Once the material is melted, alloying agents are added as necessary to meet customer specifications. Additionally, chlorine gas is also added into the molten bath to remove magnesium. The two furnaces are natural gas-fired with No. 2 fuel oil as reserve.

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "*Major Source Operating Permits*".

- This source is subject to ADEM Admin. Code r. 335-3-4-.04(1), "Control of Particulate Emissions for Process Industries – General".

- This unit is subject to ADEM Admin. Code r. 335-3-4-.01(1), "Control of Particulate Emissions – Visible Emissions".

- Per § 63.1500, group 1 furnaces (two reverberatory furnaces), located at a secondary aluminum production facility that it a major source of hazardous air pollutants (HAPS) emissions is subject to the applicable provisions of 40 CFR 63 Subpart RRR, "*National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*".

- Per § 63.1518, a major source secondary aluminum production facility is subject to the applicable provisions of 40 CFR Subpart A, "General Provisions" as listed in Appendix A Subpart RRR.

- These units have an enforceable limit in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]."

Emissions Standards:

- Opacity
    - ADEM Admin Code r. 335-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- Particulate Matter
    - Particulate matter emissions from the stacks associated with the reverberatory furnace no. 1 shall not exceed the lesser of the Anit-PSD limit of 4.0 lbs/hr as required by ADEM Admin Code r. 335-3-14-.04

    OR

    the allowable set by ADEM Admin Code r. 335-3-4-.04(1), which states no person shall cause or permit the emission of particulate matter in excess of the amount for the process weight per hour allocated to such source accomplished by use of the equation:

$E = 3.59 (P)^{0.62}$ (P less than 30 tons per hour)

$E = 17.31 (P)^{0.16}$ (P greater than 30 tons per hour)

Where E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

- Particulate matter emissions from the stack associated with the reverberatory furnace no. 2 shall not exceed the lesser of the Anit-PSD limit of 4.9 lbs/hr as required by ADEM Admin Code r. 335-3-14-.04

OR

the allowable set by ADEM Admin Code r. 335-3-4-.04(1), which states no person shall cause or permit the emission of particulate matter in excess of the amount for the process weight per hour allocated to such source accomplished by use of the equation:

$E = 3.59 (P)^{0.62}$ (P less than 30 tons per hour)

$E = 17.31 (P)^{0.16}$ (P greater than 30 tons per hour)

Where E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

- PM from the reverberatory furnace no.1 and no. 2 must not discharge or cause to be discharged to the atmosphere emissions in excess 0.20 kg of PM per Mg (0.40 lb of PM per ton of feed), each as required by §63.1505(i)(1) of 40 CFR 63 Subpart RRR. *(§63.1505(i)(1) Subpart RRR)*

- Operating
    - The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace that identifies the applicable emission limits and means of compliance, including:

    1) The type of affected sources or emission unit (*e.g.*, group 1 furnace).

    2) The applicable operational standard(s) and control method(s). This includes, but is not limited to, the type of charge to be used for the furnace, flux materials and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan. *(§63.1506(b)(1&2) Subpart RRR)*

    - The owner or operator for each affected emission unit equipped with an add-on air pollution control device must:

    1) Design and install a system for the capture and collection of emissions to meet engineering standard for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice"

    2) Vent captured emissions through a closed system, and

    3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan. *(§63.1506(c)(1-3) Subpart RRR)*

- The owner or operator of these units subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must:

1) Install and operated a device or develop a procedure that measures and records or otherwise determine the weight of feed/charge or each operating cycle or time period used in the performance test; and

2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

3) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that the aluminum production weight is measured and recorded for all emission units with a SAPU and all calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight. *(§63.1506(d)(1-3) Subpart RRR)*

- The owner or operator of these group 1 furnaces with emissions controlled by a lime-injected fabric filter must:

1) If a bagleak detection system is used to meet the monitoring requirement in §63.1510, the owner or operator must initiate corrective action within 1 hour of bag leak detection system alarm.

2) Complete the corrective action procedures in accordance with the OM&M plan.

3) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner operator to initiate corrective action.*(§63.1506(m)(1) Subpart RRR)*

4) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25 °F). *(§63.1506(m)(3) Subpart RRR)*

5) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test. *(§63.1506(m)(4) Subpart RRR)*

6) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test. *(§63.1506(m)(5) Subpart RRR)*

7) Operate each sidewell furnace such that the level of molten metal remains above the top passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in

demonstrating compliance with all applicable emission limits. *(§63.1506(m)(6)(i) Subpart RRR)*

8) Reactive flux is added only in the sidewell unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits. *(§63.1506(m)(6)(ii) Subpart RRR)*

- SO_2
  - The fuel burned in the furnaces shall not exceed 510,880 gallons during any consecutive twelve (12) month period. In addition, the sulfur content of the fuel oil burned in the furnaces shall not exceed 1.1 percent (1.1%) by weight as required by ADEM Admin Code r. 335-3-14-.04 (Anti-PSD).

- Dioxins and Furans
  - Dioxins and Furans from the reverberatory furnace no.1 and no. 2 must not discharge or cause to be discharged to the atmosphere emission in excess 15 μg of Dioxin/Furan (D/F) TEQ per Mg (2.1×10^{-4} grain Dioxin/Furan TEQ per ton of feed), each as required by §63.1505(i)(3) of 40 CFR 63 Subpart RRR. *(§63.1505(i)(3) Subpart RRR)*

- HCl
  - HCl from the reverberatory furnace no.1 and no. 2 must not discharge or cause to be discharged to the atmosphere emission in excess 0.20 kg of HCl per Mg (0.40 lb of HCl per ton of feed), each as required by §63.1505(i)(4) of 40 CFR 63 Subpart RRR. *(§63.1505(i)(4) Subpart RRR)*

Expected Emissions

The maximum expected emissions are as follows:

Pollutant	Expected Emissions (lb/hr)	Expected Emissions (TPY)
PM	.084	.36
SO_2	1.08	4.73
NO_x	3.04	13.32
CO	3.89	17.03
VOC	6.01	26.33
HCl	.14	.61
D/F	1.8e-8	7.88e-8
HF	1.8e-8	7.88e-8

The PM, HCl and D/F emissions were based on an emission test performed on December 11, 2007. VOC and CO emissions were based on AP-42 emissions factors and operating 8,760 hours. SO_2, NO_X, HF is based on a stack test of a similar unit.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate matter(PM) emissions shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*
- Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved by the Department shall be used in the determination of the opacity of the stack emissions. *(ADEM Admin.Code r. 335-3-1-.05)*
- If testing is required, sulfur dioxide emissions shall be determined in accordance with Method 6c of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*
- If testing is required, Dioxin/Furan emissions shall be determined in accordance with Method 23 of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*
- If testing is required, HCl emissions shall be determined in accordance with Method 26A of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*

- The sulfur content of the fuel oil delivered to the furnaces shall be measured in accordance with ASTM D129-64 or an alternative method approved by the Department. *(ADEM Admin.Code r. 335-3-1-.05)*

- To comply with the PM, HCl, and Dioxin/Furan standards of Subpart RRR, the owner or operator must meet all of the following *(40 CFR §63.1511 Subpart RRR)*:

    - The owner or operator must prepare a site-specific test plan which satisfies all the requirements, and must obtain approval of the plan pursuant to the procedures, set for in *§63.7(c).*

    - Do a performance test as specified in *§63.1512* of this subpart and show compliance with PM, HCl, and D/F limits at the outlet of the control device.

    - The owner or operator of these emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by *§63.1510* that ensures compliance with the applicable emission limit or standard.

- The performance test conducted to demonstrate compliance with the emissions limits in §63.1505 shall conform to the test methods and procedures specified in §63.1511 and §63.1512.

- Using the results of the performance tests, the owner or operator must use the following equation to determine compliance with the PM, HCl, and D/F limit:

$$E = \frac{C \times Q \times K_1}{P}$$

where:

E = Emission rate of PM or HCl, kg/Mg (lb/ton) of melt.

C = Concentration of PM or HCl, g/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).

P = Production rate, Mg/hr (ton/hr).

To determine compliance with an emission limit for D/F:

$$E = \frac{C \times Q \times K_1}{P}$$

where:

E = Emission rate of D/F, μg/Mg (gr/ton) of feed.

C = Concentration of D/F, μg/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); and

P = Production rate, Mg/hr (ton/hr).

- The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

    - Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

- Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

- Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1 W_1 + F_2 W_2 \qquad (Eq.\ 5)$$

Where,

W_t= Total chlorine usage, by weight;

F_1= Fraction of gaseous or liquid flux that is chlorine;

W_1= Weight of reactive flux gas injected;

F_2= Fraction of solid reactive chloride flux that is chlorine (*e.g.*, F = 0.75 for magnesium chloride; and

W_2= Weight of solid reactive flux;

- Divide the weight of total chlorine usage (Wt) for the three (3) test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

- If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the Department.

Emission Monitoring:

- These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in §63.1510 (a), (b), (c), (d), (e), (f), (h),(i)(3), and (v).

1) §63.1510 (b) Operation, maintenance, and monitoring (OM&M) plan. The owner or operator must prepare and implement for these units, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a

revised plan incorporating them to the permitting authority. Each plan must contain the following information:

a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

b. A monitoring schedule for each affected source and emission unit.

c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR §63.1505.

d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

i Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems (if applicable) as required by the general provisions in subpart A of this part.

e. Procedures for monitoring process and control device parameters, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in §63.1510 (b)(1), including:

i Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and

ii Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

g. A maintenance schedule for these units that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

2) §63.1510 (c) Labeling. The owner or operator must inspect the labels of the group 1 furnace at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.

3) §63.1510 (d) Capture/Collection system. The owner or operator must:

i Install, operate, and maintain a capture/collection system for each emission unit equipped with an add-on air pollution control device; and

ii Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection.

4) §63.1510 (e) Feed/charge weight. The owner or operator of these units must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

i The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

ii The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

5) §63.1510 (f) Fabric filters and lime-injected fabric filters. The owner or operator of these units using a fabric filter or lime injected fabric to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bagleak detection system as required in paragraph (f)(1) of 40 CFR Subpart RRR or a continuous opacity monitoring system as required in paragraph (f)(2) of 40 CFR Subpart RRR. These requirements apply to the owner or operator of these units using a bagleak detection system.

i The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter

ii Each triboelectric bag leak detection system must be installed, calibrated, operated and maintained according to the "Fabric Filter Bag Leak Detection Guidance".

iii The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

iv The bag leak detection system sensor must provide output of relative or absolute PM loadings.

v The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

vi The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

vii For positive pressure fabric filter systems, a bag leak detection system must be in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

viii Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

ix The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

x Following initial adjustment of the system, the owner or operator must no adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection with demonstrates that the fabric filter is in good operating condition.

6) §63.1510 (h) Fabric filters inlet temperature. The owner or operator of these units using a fabric filter or lime injected fabric to comply with the requirements of this subpart must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems on subpart A of 40 CFR Subpart RRR.

a. The temperature monitoring device must meet each of these performance and equipment specifications:

i The monitoring system must record the temperature in 15-minut block averages and calculate and record the average temperature for each 3-hour block period.

ii The recorder response range must include zero and 1.5 times the average temperature established according to the requirement in §63.1512 (n).

iii The reference method must be a National Institute of Standard and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Department.

7) §63.1510 (i)(3) Lime injection. If the facility intermittently adds lime to a lime coated fabric filter, the facility must obtain approval from the Department for a lime addition monitoring procedure. The Department will not approve a monitoring procedure unless data and information are submiited establishing that

the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

8) §63.1510 (j). The total reactive flux injection rate. These requirements apply to the owner or operator of these units.

a. The owner or operator must install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit:

i The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

ii The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the Department for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ±1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.

iii The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

b. Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512 (o).

c. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

i Gaseous or liquid reactive flux other than chlorine; and

ii Solid reactive flux

d. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR §63.1512(o).

e. The owner or operator of these units performing reactive fluxing may apply to the Department for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and

information that the affected source will meet the relevant emission standards on a continuous basis.

9) §63.1510 (i) The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

a. Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8 hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3 day period; or

b. Subject to approval of the permiting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or

c. Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicated that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.

- On days when the associated furnaces are operating, the facility shall perform a daily inspection of the baghouses to verify proper operation. The following activities shall be performed *(ADEM Admin. Code r. 335-3-16-.05)*:

a. Once per day check the furnace hoods for fugitive emissions.

b. Once per day check for presence of fugitive emissions from the furnace building.

Recordkeeping and Reporting Requirements:

- The facility shall record the amount of fuel oil burned in gallons and the sulfur content of the fuel oil. The facility must keep records showing monthly and 12 month total of all fuel oil burned. Each record shall be maintained for a period of at least 5 years following the use of this fuel.

- The permittee shall keep records of all inspections performed on the furnace hoods, furnace hoods, furnace building, ductwork, and the furnace baghouse. Each record shall be maintained for a period of at least 5 years.

- These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in §63.1515(a),(b)(1-6,9&10),§63.1516(a),(b),(c),§63.1517(a)(1-3), (b)(1,3,4,10,13-17).

1) §63.1515 (a) Initial notifications. The owner or operator must submit initial notifications to the Department as described below:

a. After the effective date (March 23, 2000), the owner or operator who intends to construct a new affected source or reconstruct an affected source subject to 40 CFR 63, Subpart RRR, or reconstruct a source such that is becomes an affected source subject to 40 CFR 63, Subpart RRR, must provide notification or the intended construction or reconstructions. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR §63.5(d).

i The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of 40 CFR 63, Subpart RRR; or

ii The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

b. As required by 40 CFR §63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

c. As required by 40 CFR §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible

emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

2) §63.1515 (b) Notification of Compliance Status Report. Each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

a. All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report

includes all data, associated measurements, and calculations (including visible emission and opacity tests).

b. The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.

c. Unit labeling as described in 40 CFR §63.1506(b), including process type or furnace classification and operating requirements.

d. The compliant operating parameter value or range established for the emission unit with supporting documentation and a description of the procedure used to establish the value; (*e.g.* afterburner operating temperature) including the operating cycle or time period used in the performance test.

e. Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR §63.1506(c).

f. Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.1510(f).

g. The OM&M plan.

h. Startup, shutdown, and malfunction plan, with revisions.

3) §63.1516 (b) Reports. The owner or operator must comply with the applicable reporting requirements found in §63.1516 (a), (b), and (c). §63.1516 (a) Startup, shutdown, and malfunction plan/reports. The owner or operator must develop a written plan as described in 40 CFR §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR §63.6(e)(3). In addition to the information required in 40 CFR §63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4) §63.1516 (b) Excess emissions/summary report. The owner or operator must submit semiannual reports according to the requirements in 40 CFR §63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR §63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

a. A report must be submitted if any of these conditions occur during a 6-month reporting period:

   i The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

   ii An excursion of a compliant process or operating parameter value or range.

   iii An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR §63.6(e)(3).

   iv An affected source was not operated according to the requirements of this subpart.

b. Each report must include the following certifications:

   i For each sidewell group 1 furnace with add-on air pollution control devices: “Each furnace was operated such that the molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.

c. *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

i Any period of excess emissions, as defined in §63.1516 (b)(1) of Subpart RRR, that occurred during the year were reported as required by Subpart RRR and

ii All monitoring, recordkeeping, and reporting requirements were met during the year.

5) The owner or operator of these units must maintain records and information as required by 40 CFR §63.1517(a) and (b).

a. §63.1517 (a) Excess emissions/summary report. As required by 40 CFR §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR.

i The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

ii The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

iii The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

b. §63.1517 (b) In addition to the general records required by 40 CFR §63.10(b), the owner or operator these units must maintain records of:

i If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, record of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action (s) taken.

ii For each group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minut block average inlet temperatures for each lime injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

i. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter: records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of

inspections at least once very 4-hour periold of the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken; if the lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any derviation of the the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.

iii For each group 1 furnace or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations, including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

iv For each continuous monitoring system, records required by §63.10(c).

v For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

vi Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive

flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

vii Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

viii Records of annual inspections of emission capture/collection and closed vent systems.

ix Records for any approved alternative monitoring or test procedure.

x Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan including startup, shutdown, and malfunction plan, OM & M plan, and Site-specific secondary aluminum processing unit emission plan.

xi For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

Aluminum Scrap Shredder with Cyclone controlled Baghouse

Process Description:

Aluminum scrap is loaded unto a conveyor via a front end loader. The material is transported to the hammer mill where the aluminum is crushed/sized. After exiting the hammer mill via a conveyor, the material is transported to the screening process. After screen the aluminum scrap is moved to storage.

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "*Major Source Operating Permits*".

- This source is subject to ADEM Admin. Code r. 335-3-4-.04(1), "Control of Particulate Emissions for Process Industries – General".

- This unit is subject to ADEM Admin. Code r. 335-3-4-.01(1), "Control of Particulate Emissions – Visible Emissions".

- Per § 63.1500, an aluminum scrap shredder located at a secondary aluminum production facility that it a major source of hazardous air pollutants (HAPS) emissions is subject to the applicable provisions of 40 CFR 63 Subpart RRR, "*National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production"*.

- Per § 63.1518, a major source secondary aluminum production facility is subject to the applicable provisions of 40 CFR Subpart A, "General Provisions" as listed in Appendix A Subpart RRR.

- These units have an enforceable limit in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]."

Emissions Standards:

- Opacity
    - ADEM Admin Code r. 335-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- Particulate Matter
    - Particulate matter emissions from the stack associated with the aluminum scrap shredder shall not exceed the lesser of the Anit-PSD limit of 10.38 lbs/hr as required by ADEM Admin Code r. 335-3-14-.04

    OR

    the allowable set by ADEM Admin Code r. 335-3-4-.04(1), which states no person shall cause or permit the emission of particulate matter in excess of the amount for the process weight per hour allocated to such source accomplished by use of the equation:

$E = 3.59 (P)^{0.62}$ (P less than 30 tons per hour)

$E = 17.31 (P)^{0.16}$ (P greater than 30 tons per hour)

Where E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

- PM from aluminum scrap shredder must not discharge or cause to be discharged to the atmosphere emissions in excess 0.023 grams (g) of PM per dry standard cubic meter (dscm) (0.010 grain (gr) of PM per dry standard cubic foot (dscf) as required by §63.1505(b)(1) of 40 CFR 63 Subpart RRR. *(§63.1505(b)(1) Subpart RRR)*

- Operating

  - The owner or operator of this unit, equipped with an add-on control device must:

1) Design and install a system for the capture and collection of emissions to meet engineering standard for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice"

2) Vent captured emissions through a closed system, and

3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan. *(§63.1506(c)(1-3) Subpart RRR)*

- The owner or operator of this unit, equipped with emissions controlled by a fabric filter must operate a bag leak detection system must:

1) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective procedures in accordance with the OM & M plan.

i. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent or the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action. *(§63.1506(e)(1) Subpart RRR)*

Expected Emissions

The maximum expected emissions are as follows:

Pollutant	**Expected Emissions (lb/hr)**	**Expected Emissions (TPY)**
PM	4.97	21.77

The PM emissions were based on an emission test performed on August 1989.

Compliance and Performance Test Methods and Procedures

- If testing is required, particulate matter(PM) emissions shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*
- Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved by the Department shall be used in the determination of the opacity of the stack emissions. *(ADEM Admin.Code r. 335-3-1-.05)*

- To comply with the PM standard of Subpart RRR, the owner or operator must meet all of the following *(40 CFR §63.1511 Subpart RRR)*:

    - The owner or operator must prepare a site-specific test plan which satisfies all the requirements, and must obtain approval of the plan pursuant to the procedures, set for in *§63.7(c).*

    - Do a performance test as specified in *§63.1512* of 40 CFR Subpart RRR and show compliance with PM limits at the outlet of the control device.

    - The owner or operator of this unit must conduct performance tests to measure PM emissions at the outlet of the control system.

- The performance test conducted to demonstrate compliance with the emissions limits in §63.1505 shall conform to the test methods and procedures specified in §63.1511 and §63.1512.

- Using the results of the performance tests, the owner or operator must use the following equation to determine compliance with the PM limit:

$$E = \frac{C \times Q \times K_1}{P}$$

where:

E = Emission rate of PM, kg/Mg (lb/ton) of melt.

C = Concentration of PM, g/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).

P = Production rate, Mg/hr (ton/hr).

Emission Monitoring:

- These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in §63.1510 (a), (b), (d), and (f).

1) §63.1510 (b) Operation, maintenance, and monitoring (OM&M) plan. The owner or operator must prepare and implement for these units, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The plan must be

accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority. Each plan must contain the following information:

a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

b. A monitoring schedule for each affected source and emission unit.

c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR §63.1505.

d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

i Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

ii Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems (if applicable) as required by the general provisions in subpart A of this part.

e. Procedures for monitoring process and control device parameters, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in §63.1510 (b)(1), including:

i Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and

ii Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

g. A maintenance schedule for these units that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

2) §63.1510 (d) Capture/Collection system. The owner or operator must:

   i Install, operate, and maintain a capture/collection system for each emission unit equipped with an add-on air pollution control device; and

   ii Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in §63.1506(c) and record the results of each inspection.

3) §63.1510 (f) Fabric filters and lime-injected fabric filters. The owner or operator of these units using a fabric filter or lime injected fabric to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bagleak detection system as required in paragraph (f)(1) of 40 CFR Subpart RRR or a continuous opacity monitoring system as required in paragraph (f)(2) of 40 CFR Subpart RRR. These requirements apply to the owner or operator of these units using a bagleak detection system.

   i The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

   ii Each triboelectric bag leak detection system must be installed, calibrated, operated and maintained according to the “Fabric Filter Bag Leak Detection Guidance”.

iii The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

iv The bag leak detection system sensor must provide output of relative or absolute PM loadings.

v The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

vi The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

vii For positive pressure fabric filter systems, a bag leak detection system must be in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

viii Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

ix The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

- x Following initial adjustment of the system, the owner or operator must no adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection with demonstrates that the fabric filter is in good operating condition.

- o The facility shall monitor and record the pressure drop across the baghouse once per day. Corrective action must be performed falls out of the range that is established by the facility *(ADEM Admin. Code r. 335-3-16-.05)*.

- o The facility shall perform an annual inspection of the baghouse to verify proper operation. The following activities shall be performed:

a. Once per year inspect baghouse structure, access doors, door seals and bags.
b. Once per year perform an internal inspection of the baghouse hoppers.

<u>Recordkeeping and Reporting Requirements:</u>

- o The facility shall maintain a record of the pressure drop across the baghouse once per day. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.

- o These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in

§63.1515(a),(b)(1,2,5,6,9&10), §63.1516(a),(b),(c),§63.1517(a)(1-3), (b)(1,6,14-16).

2) §63.1515 (a) Initial notifications. The owner or operator must submit initial notifications to the Department as described below:

a. After the effective date (March 23, 2000), the owner or operator who intends to construct a new affected source or reconstruct an affected source subject to 40 CFR 63, Subpart RRR, or reconstruct a source such that is becomes an affected source subject to 40 CFR 63, Subpart RRR, must provide notification or the intended construction or reconstructions. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR §63.5(d).

i The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of 40 CFR 63, Subpart RRR; or

ii The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

b. As required by 40 CFR §63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

c. As required by 40 CFR §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

3) §63.1515 (b) Notification of Compliance Status Report. Each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

a. All information required in §63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).

b. The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.

c. Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR §63.1506(c).

d. Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in §63.1510(f).

e. The OM&M plan.

f. Startup, shutdown, and malfunction plan, with revisions.

3) §63.1516 (b) Reports. The owner or operator must comply with the applicable reporting requirements found in §63.1516 (a), (b), and (c). §63.1516 (a) Startup, shutdown, and malfunction plan/reports. The owner or operator must develop a written plan as described in 40 CFR §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for

malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR §63.6(e)(3). In addition to the information required in 40 CFR §63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4) §63.1516 (b) Excess emissions/summary report. The owner or operator must submit semiannual reports according to the requirements in 40 CFR §63.10(e)(3). Except, the owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in 40 CFR §63.10(e)(3)(v). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

a. A report must be submitted if any of these conditions occur during a 6-month reporting period:

i The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

ii An excursion of a compliant process or operating parameter value or range.

iii The corrective action specified in the OM&M plan for visible emissions from the aluminum scrap shredder was not initiated with 1 hour.

iv An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR §63.6(e)(3).

v An affected source was not operated according to the requirements of this subpart.

d. The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

e. *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

i Any period of excess emissions, as defined in §63.1516 (b)(1) of Subpart RRR, that occurred during the year were reported as required by Subpart RRR and

ii All monitoring, recordkeeping, and reporting requirements were met during the year.

5) The owner or operator of this unit must maintain records and information as required by 40 CFR §63.1517(a) and (b).

a. §63.1517 (a) Excess emissions/summary report. As required by 40 CFR §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR.

i The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

ii The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

iii The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

b. §63.1517 (b) In addition to the general records required by 40 CFR §63.10(b), the owner or operator these units must maintain records of:

i If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, record of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action (s) taken.

ii If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

iii For each continuous monitoring system, records required by §63.10(c).

iv Records of annual inspections of emission capture/collection and closed vent systems.

v Records for any approved alternative monitoring or test procedure.

vi Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan including startup, shutdown, and malfunction plan, OM & M plan, and Site-specific secondary aluminum processing unit emission plan.

Three Melting/Pot Preheat Pots

Process Description:

Clean aluminum charge (no reactive flux and no HAP-generating fluxing material) is melted at three (3) existing preheating pot stations. All three melting pots are fired by natural gas burners.

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "*Major Source Operating Permits*".

- This source is subject to ADEM Admin. Code r. 335-3-4-.04(1), "Control of Particulate Emissions for Process Industries – General".

- This unit is subject to ADEM Admin. Code r. 335-3-4-.01(1), "Control of Particulate Emissions – Visible Emissions".

- Per § 63.1500, group 2 furnaces (three melting/preheat pots) located at a secondary aluminum production facility that it a major source of hazardous air pollutants (HAPS) emissions is subject to the applicable provisions of 40 CFR 63 Subpart RRR, *"National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production"*.

- Per § 63.1518, a major source secondary aluminum production facility is subject to the applicable provisions of 40 CFR Subpart A, "General Provisions" as listed in Appendix A Subpart RRR.

- These units have an enforceable limit in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]."

Emissions Standards:

- Opacity
    - ADEM Admin Code r. 335-4-.01(1)(a)(b), states no person shall discharge particulate emissions of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period a person may discharge into the atmosphere from any source of emission forty (40%) percent opacity.

- Particulate Matter
    - The allowable set by ADEM Admin Code r. 335-3-4-.04(1), which states no person shall cause or permit the emission of particulate matter in excess of the amount for the process weight per hour allocated to such source accomplished by use of the equation:

      $E = 3.59 (P)^{0.62}$ (P less than 30 tons per hour)

      $E = 17.31 (P)^{0.16}$ (P greater than 30 tons per hour)

      Where E = Emissions in pounds per hour

      P = Process weight per hour in tons per hour

    - The total combined clean charge melted in these pots shall not exceed 20,088 tons in any consecutive 12-month period (ADEM Admin. Code r. 335-3-14-.04).

- Operating

    - The owner or operator must provide and maintain easily visible labels posted at each unit that identifies the applicable emission limits and means of compliance including (40 CFR §63.1506 (b)(1&2), (o)(1&2):

      1) The type of affected source or emission unit.

      2) The type of charge to be used in the melting pots.

    - The owner or operator of these units must (40 CFR §63.1506 (o)(1&2)):

      1) Operate each unit using only clean charge as the feedstock.

      2) Operate each unit using no reactive flux.

Expected Emissions

The maximum expected emissions are as follows:

Pollutant	Expected Emissions (lb/hr)	Expected Emissions (TPY)
PM	3.51	5.22
SO_2	.006	.008
NO_x	3.98	5.93
CO	.79	1.18
VOC	.27	.40

The PM, NO_X, and VOC emissions were based on a stack test of a similar unit. SO_2 and CO emissions were based on AP-42 emissions factors and operating 8,760 hours.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate matter(PM) emissions shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A. *(ADEM Admin.Code r. 335-3-1-.05)*
- Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved by the Department shall be used in the determination of the opacity of the stack emissions. *(ADEM Admin.Code r. 335-3-1-.05)*

Emission Monitoring:

- These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in §63.1510 (c), (r)(1-2).

1) §63.1510 (c). The facility shall inspect the labels for each Melting/Preheat pot at least once per calendar month to confirm that posted labels as required by §63.1506(b) are intact and legible.

2) §63.1510 (r)(1). The facility shall record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non Hap generating fluxing materials or agents.

3) §63.1510 (r)(2). The facility shall submit a certification of compliance with the applicable operation standard for charge materials in §63.1506(o) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(v).

Recordkeeping and Reporting Requirements:

- These sources are subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, " National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing" to include the monitoring requirements in §63.1515 (a), (b)(3), §63.1516 (a),(c), §63.1517 (a)(1-3), (b)(12).

1) §63.1515 (a) Initial notifications. The owner or operator must submit initial notifications to the Department as described below:

a. After the effective date (March 23, 2000), the owner or operator who intends to construct a new affected source or reconstruct an affected source subject to 40 CFR 63, Subpart RRR, or reconstruct a source such that is becomes an affected source subject to 40 CFR 63, Subpart RRR, must provide notification or the intended construction or reconstructions. The notification must include all the information required for an application for approval of construction or reconstruction as required by 40 CFR §63.5(d).

i The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of 40 CFR 63, Subpart RRR; or

ii The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction

or reconstruction had commenced and initial startup had not occurred before the effective date.

b. As required by 40 CFR §63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

c. As required by 40 CFR §63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

2) §63.1515 (b) Notification of Compliance Status Report. Each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by §63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by §63.1511(b), or within 90 days after the compliance date established by §63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the

information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

a. Unit labeling as described in 40 CFR §63.1506(b), including process type or furnace classification and operating requirements.

3) §63.1516 (b) Reports. The owner or operator must comply with the applicable reporting requirements found in §63.1516 (a), (b), and (c). §63.1516 (a) Startup, shutdown, and malfunction plan/reports. The owner or operator must develop a written plan as described in 40 CFR §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR §63.6(e)(3). In addition to the information required in 40 CFR §63.6(e)(3), the plan must include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

4) *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

i Any period of excess emissions, as defined in §63.1516 (b)(1) of Subpart RRR, that occurred during the year were reported as required by Subpart RRR and

ii All monitoring, recordkeeping, and reporting requirements were met during the year.

5) The owner or operator of these units must maintain records and information as required by 40 CFR §63.1517(a) and (b).

a. §63.1517 (a) Excess emissions/summary report. As required by 40 CFR §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR 63, Subpart RRR.

i The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action,

report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

ii The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

iii The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

b. §63.1517 (b) In addition to the general records required by 40 CFR §63.10(b), the owner or operator these units must maintain records of:

i Record of all charge materials and fluxing materials or agents for a group 2 furnace.

o Records summarizing the monthly and consecutive twelve (12) month total of combined clean charge melted shall be kept in a permanent form suitable for inspection. Record shall be maintained for a period of five (5) years from the date of generation.